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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JONES, HEATHER RAE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/602,880	<b>Applicant(s)</b> SEO ET AL.	
	<b>Examiner</b> HEATHER R. JONES	<b>Art Unit</b> 2481	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7,9,16-18,20,21,23-26,29,30,32,33,37 and 41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,9,16-18,20,21,23-26,29,30,32,33,37 and 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/22/2010,3/1/2011</u> .                                     | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, filed January 25, 2011, with respect to the rejection(s) of claim(s) 1, 2, 6, 7, 9, 16-18, 20, 21, 23-26, 29, 30, 32, 33, 37, and 44 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference.

### ***35 USC § 101***

2. Optical recording medium claims 1, 2, 6, 7, 9, 37, and 44 are considered to be statutory because they do not include transitory mediums. Method claims 16-18, 29, 30, 32, and 33 are considered to be statutory because managing reproduction of video data containing data packets can not be performed without the aid of a machine to process the video data. Apparatus claims 20, 21, and 23-26 are considered to be statutory because the specification does not disclose that the apparatus can be implemented solely using software.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2481

4. Claims 1, 2, 6, 7, 9, 16-18, 20, 21, 23-26, 29, 30, 32, 33, 37, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (U.S. Patent 5,884,004) in view of Kato et al. (U.S. Patent Application Publication 2002/0145702) in view of Hirayama et al. (U.S. Patent 5,819,003) in view of Laurin et al. (U.S. Patent Application Publication 2003/0108164).

Regarding claim **1**, Sato et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths, comprising: a data directory storing a plurality of clip files of the video data having multiple playback paths, the video data including a plurality of data packets, each clip file being associated with one of the playback paths (Fig. 21; col. 6, lines 65-67); and a management directory storing management information for managing reproduction of the video data having multiple playback paths, the management information including a plurality of clip information files, each clip file being associated with one of the clip information files, the associated clip information file providing at least one map, the map mapping a presentation time stamp to a corresponding source packet address of the associated clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet

of the at least one entry point; and a playlist directory area storing at least one playlist file including at least one playitem, the plurality of clip files being associated with the playlist file, the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths, the playitem identifying a playing interval in the plurality of clip files associated with the multiple playback paths, the playitem identifying the information files associated with the clip files of the multiple playback paths, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses an optical recording medium having a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory storing at least one playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point; and the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet from the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); and a map identifying at least one entry point for an associated clip file by identifying

the packet number of the data packet of the at least one entry point (Figs. 8A-8C).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in order to have the multiple playback paths played back seamlessly. Furthermore, once Hirayama et al. is combined with Kato et al. then the playitem would include multiple clip files having the same playing intervals representing the multiple playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Laurin et al. reference, Laurin et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for

each clip file in the multiple playback path being the same as disclosed by Laurin et al. in medium disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **2**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that a group of playlist files is associated with each playback path (Sato et al.: Figs. 20-24 – shows different playback paths).

Regarding claim **6**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the navigation information managing the playlist file to be reproduced (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **7**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claims 1 and 6 including that the different playback paths are related to different stories (Sato et al.: Fig. 21 - different scenarios).

Regarding claim **9**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the data directory stores a plurality of clip files of the video data having multiple



playback paths, and the video data for each playback path is stored in a different clip file (Sato et al.: col. 6, lines 60-65).

Regarding claim **16**, Sato et al. discloses a method of reproducing a data structure for managing reproduction of video data having multiple playback paths for each title from a recording medium, the method comprising: reproducing at least the playlist file from the recording medium (Figs. 18, 20-24, and 30; col. 21, lines 12-19; col. 22, lines 23-33); and reproducing the clip file of the video data having multiple playback paths from the recording medium; the video data including a plurality of data packets; reproducing at least one clip file of the video data having multiple playback paths from the recording medium (col. 32, line 56 - col. 33, line 16); and reproducing management information for managing reproduction of the video data having multiple playback paths from a management area of the recording medium, the management information including a plurality of information files, the clip file being associated with one of the information files, the information file providing at least one map for the associated clip file, the map mapping a presentation times stamp to a corresponding address in the associated clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, a map identifying at least one entry point for an associated clip file by identifying the packet number

of the data packet of the at least one entry point; and a playlist directory area storing at least one playlist file including at least one playitem, the plurality of clip files being associated with the playlist, the playitem identifying a same playing interval in clip file of the plurality of clip files associated with the multiple playback paths, the playitem identifying clip information files associated with the clip files of the multiple playback paths, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses a method of reproducing a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory storing at least one playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the clip information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point

map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point, and the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Hirayama et al. reference, Hirayama et al. discloses a method of reproducing a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet from the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); and a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point (Figs. 8A-8C).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in order to have the multiple playback paths played back seamlessly. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Laurin et al. reference, Laurin et al. discloses a method having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for each clip file in the multiple playback path being the same as disclosed by Laurin et al. in method disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **17**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 16 including that the reproducing step reproduces a group of playlist files based on the navigation information for managing the playlist files (Sato et al.: col. 32, line 56 - col. 33, line 16).

Regarding claim **18**, Sato et al. discloses a method of recording a data structure for managing reproduction of at least video data having multiple playback paths on a recording medium, the method comprising: recording a plurality of clip files of the video data having multiple paths on the recording medium, each clip being associated with one path of the multiple playback paths, the video data including a plurality of data packets (col. 6, lines 60-65); and recording management information for managing reproduction of the video data of the recording medium, the management information including a plurality of information files, each clip file being associated with one of the information files, the associated information file providing at least one map identifying for the associated clip file, the map containing presentation time stamp to a corresponding source packet address of the associated clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, a map identifying at least

one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point; and a playlist directory area storing at least one playlist file including at least one playitem, the plurality of clip files being associated with the playlist, the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths, the playitem identifying the information files associated with the clip files of the multiple playback paths, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses a method of recording a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory storing at least one playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point, and the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet from the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); and a map identifying at least one entry point for an associated clip file by identifying

the packet number of the data packet of the at least one entry point (Figs. 8A-8C).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in order to have the multiple playback paths played back seamlessly. Furthermore, once Hirayama et al. is combined with Kato et al. then the playitem would include multiple clip files having the same playing intervals representing the multiple playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Laurin et al. reference, Laurin et al. discloses a method having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for



each clip file in the multiple playback path being the same as disclosed by Laurin et al. in method disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **20**, Sato et al. discloses an apparatus for recording a data structure for managing reproduction of at least video data having multiple playback paths, comprising: an optical pickup (1200) configured to record data on a recording medium (Fig. 2); and a controller (200 and 1200), operably coupled to the optical pickup, configured to control the optical pickup to record a plurality of clip files of the video data having multiple playback paths on the recording medium, each clip file being associated with one path of the multiple playback paths (Figs. 18, 20-24, and 30; col. 6, lines 60-64; col. 20, lines 22-56; col. 21, lines 12-19; col. 22, lines 23-33); the controller configured to control the optical pickup to record management information for managing reproduction of the video data having multiple playback paths on the recording medium, the video data including a plurality of data packets, the management information including a plurality of information files, each clip file being associated with one of the information files, the map mapping presentation time stamp to a corresponding address in the associated clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips; col. 22, lines 11-12). However, Sato et al. fails to disclose that each data packet having a packet number

differentiating the data packet from the plurality of data packets, a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point; and a playlist directory area storing at least one playlist file including at least one playitem, the plurality of clip files being associated with the playlist, the playitem identifying a playing interval in the plurality of clip files associated with the multiple playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses an optical computer readable medium having a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory storing at least one playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist

identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point, and the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet from the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A -

discloses how many stories there are; col. 9, lines 18-36); and a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point (Figs. 8A-8C).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in order to have the multiple playback paths played back seamlessly. Furthermore, once Hirayama et al. is combined with Kato et al. then the playitem would include multiple clip files having the same playing intervals representing the multiple playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Laurin et al. reference, Laurin et al. discloses a medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for each clip file in the multiple playback path being the same as disclosed by Laurin et al. in medium disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **21**, Sato et al. discloses an apparatus for reproducing a data structure for managing reproduction of at least video data having multiple playback paths, comprising: an optical pickup (2004) configured to reproduce data recorded on a recording medium (Fig. 3); and a controller (2002), operably coupled to the optical pickup, configured to control the optical pickup to reproduce at least one playlist file in a playlist directory area of the recording medium (Figs. 18, 20-24, and 30; col. 6, lines 60-64; col. 20, lines 22-56; col. 21, lines 12-19; col. 22, lines 23-33), the playlist file for identifying a portion of the video data (Figs. 18, 20-24, and 30; col. 20, lines 23-53; col. 21, lines 12-19; col. 22, lines 23-33); the controller configured to control the optical reproducing unit to reproduce management information for managing reproduction of the video data having multiple playback paths from the recording medium, the video data including a plurality of data packets, the management information including a plurality of clip information files, each clip file being associated with one of the information files, each clip information file providing at least one map for the associated clip file, the map mapping

presentation time stamp to a corresponding address in the associated clip file, and the controller configured to control the optical pickup to reproduce at least one clip file of the video data from the recording medium based on the playlist file and the management information (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point; and a playlist directory area storing at least one playlist file including at least one playitem, the plurality of clip files being associated with the playlist, the playitem identifying a playing interval in the plurality of clip files associated with the multiple playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses an optical computer readable medium having a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory storing at least one playlist file including at least one

playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point, and the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet from the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point (Figs. 8A-8C); and identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths (col. 8, lines 50-67 and Fig. 3B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in order to have the multiple playback paths played back seamlessly. Furthermore, once Hirayama et al. is combined with Kato et al. then the playitem would include multiple clip files having the same playing intervals representing the multiple playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to



disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths.

Referring to the Laurin et al. reference, Laurin et al. discloses an apparatus having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for each clip file in the multiple playback path being the same as disclosed by Laurin et al. in apparatus disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **23**, Sato et al. in view Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 20 including that a group of playlist files is associated with each playback path (Figs. 20-24 – shows different playback paths).

Regarding claim **24**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as

previously discussed with respect to claims 20 and 23 including that the navigation information is stored on the recording medium, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **25**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 21 including that a group of playlist files is associated with each playback path (Kato et al.: Figs. 20-24 – shows different playback paths).

Regarding claim **26**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claims 21 and 25 including that the navigation information is stored on the recording medium, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **29**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 16 including reproducing navigation information stored in a navigation area, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **30**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as

previously discussed with respect to claim 18 including that reproducing at least one playlist file reproduces a group of playlist files based on the navigation information (Sato et al.: col. 6, lines 60-67; col. 20, lines 22-56; col. 21, lines 12-15).

Regarding claim **32**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 18 recording navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **33**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 19 including that the recording the at least one playlist file records a group of playlist files based on the navigation information (Sato et al.: col. 6, lines 60-67; col. 20, lines 22-56; col. 21, lines 12-15; Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **37**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the at least one clip file is linked to more than one of the plurality of playlist files (Sato et al.: Fig. 21).

Regarding claim **44**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the clip file

includes source packets, the source packets including a header and a transport packet, the transport packet including a packet identifier (PID), the source packet including a source packet number indicating the address in the clip file (Kato et al.: paragraph [0378]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 a-3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on 571-272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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